



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,573	11/24/2003	Toshio Morii	245632US0	1226

22850 7590 10/27/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,573

Applicant(s)

MORII ET AL.

Examiner

Michael A. Marcheschi

Art Unit

1755

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-8,10-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2,5-8,10-15 and 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1755

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/8/05 has been entered.

Claims 1, 2, 5, 6 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht (104).

Albrecht teaches in column 11, line 57-column 12, line 50, a **stable** silica slurry (silica sol) having a silica solids content of **about** 70 (“about” permits some tolerance), wherein the silica has a size within the claimed range and are defined as non aggregated particles. The reference defines a viscosity for the slurry at a solids content of 50%. The silica is dispersed with water or an organic material.

The reference teaches a high silica slurry which has the claimed silica content, silica size and viscosity, all which overlap the claimed range and therefore the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976).

Art Unit: 1755

With respect to the size ratio, the reference teaches a size and states that the particles are unaggregated thus it is the examiners position that the size defined by the reference can be considered the primary particle size. Since the particles are unaggregated, the secondary size can also be the same as the primary size (100 millimicrons). In view of this, the primary and secondary (aggregate) size ratio can be 1, thus reading on the claimed ratio because the claimed ratio is apparently indicating the same thing (secondary/primary size ratio). In view of this, the size ratio limitation is met absent evidence to the contrary. In addition, as can be seen from the instant specification, the claimed viscosities (these viscosities are clearly disclosed by the reference) are a result of the claimed size ratio, thus if the viscosities are the same (and the size and solids content are defined by the reference (see above)), the claimed ratio is apparent because a composition having similar viscosity values, coupled with other criteria that are similar (size and solids content) is expected to have similar properties (i.e. ratio) that would result in said viscosity. In other words, it appears that the claimed viscosity is a direct result of the claimed ratio and since the claimed viscosity is disclosed by the reference, the claimed size ratio is indirectly suggested absent evidence to the contrary.

Although the claimed viscosity ratio is not literally defined, it is the examiners position since the reference teaches a stable slurry, it broadly reads on the claimed ratio because it is the examiners position that a stable slurry will have viscosity values that do not appreciably differ from one another at the time of mixing and after storage absent evidence to the contrary.

With respect to the limitation of the use of two silica powder of different size, the reference teaches a particle size range and it is the examiners position that not all of the particle will have the same size, thus reading on the claimed limitation absent evidence to the contrary.

Art Unit: 1755

With respect to the impurity limitation , the reference is silent with respect to impurities, thus it is the examiners position that this indicates that the silica is pure and therefore reads on the claimed limitations absent evidence to the contrary.

With respect to the water limitation , the reference uses “water” and this broadly encompasses distilled water.

With respect to limitation of claim 23, an alcohol is not definitely defined as being present in the claimed invention.

Claims 7, 8, 10-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht (104), as applied to claim 1 above and further in view of Payne.

Payne teaches in column 1, lines 10+ that silica slurries (silica sols) are known to be used to polish silica wafers (in semiconductors).

As defined above, Albrecht teaches the claimed high silica slurry. Although this reference does not literally define the use of the silica sol (for polishing), it is the examiners position that one skilled in the art would have found it obvious to use the silica sol defined by the primary reference as a polishing material for polishing semiconductors because silica sols are generally known to be used for this purpose. One skilled in the art would have appreciated that the silica sols according to the primary reference can be used in known conventional manners and since a polishing material is a known conventional use of silica sols as clearly shown by the secondary reference, its use in this manner would have been appreciated by the skilled artisan. In addition, the primary reference states in column 16, lines 70-75 that the silica sol can be used in a wide variety of application and this broadly makes any known application obvious.

Applicant's arguments with respect to all the claims have been considered but are moot in view of the new ground(s) of rejection.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968). In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971).

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

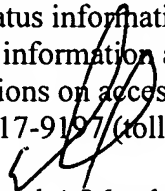
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/05

MM



Michael A Marcheschi
Primary Examiner
Art Unit 1755